# DRAFT Headquarters Investment Plan - Sustainable Harvest Strategic Objective

## Investment Strategy

Focus on long-term investments in second-growth forests to increase available timber for harvest. Phase-out investments to access harvesting areas.

## Rationales, Key Targets, and Performance Measures

*Forest Renewal BC will invest in the production of faster-growing, higher-quality stands of second-growth timber on lands available for timber production.*

***Rationale***

British Columbia's forest sector is currently in transition from harvesting mainly old-growth trees to harvesting second-growth timber. At the same time, the forest land area available for commercial timber production is being reduced, through other land-use pressures and recent measures to protect non-timber resource values. Forest Renewal BC will contribute to stabilizing the medium- and long-term sustainable harvest by increasing the volume, value and health of second-growth forests.

In its first five years, Forest Renewal BC invested in a variety of initiatives to maximize the value of the timber resource. It also invested in the ability of the forest industry to access harvesting areas and meet new resource management requirements of the Forest Practices Code. In the next five years, the corporation will focus on long-term investments in second-growth forests to increase the amount of timber available for future harvest. Forest Renewal BC will not invest in mature-forest health treatments, and will phase-out investments to access harvesting areas.

> ***In 1999/2000, the Enhanced Forestry Program of the Headquarters Investment Plan phased out projects related to mature-forest health treatments and constraints to harvesting mature areas.***

Key investment areas for the future include:

- programs to put more land - including private land and areas harvested prior to 1987 which are not yet growing healthy commercial forests - into timber production.

> ***Appendix A: Backlog Program, describes HIP contribution to this investment area.***

- enhanced forestry (e.g., brushing, spacing, pruning, pest control, fertilizing and site preparation) and tree improvement (e.g., developing genetically superior seed stock) to maximize the volume, value and health of second-growth forests, and

> ***Appendix B: Enhanced Forestry Program, describes HIP contribution to this investment area.***

- supporting the application of forest-level plans in silviculture decision-making.

Forest Renewal BC will fund the application of models and tools that link stand-level silviculture decisions to the bigger picture of the whole forest. Each forest landscape has a unique pattern of forest types and ages, land-use patterns, and timber supply issues. Therefore, each forest management unit (e.g., timber supply area or tree farm licence) will require a unique strategic mix of silviculture investments to achieve the full potential productivity of its second-growth forest.

> ***Appendix C: Forest Level Analysis for Silviculture Investment, describes HIP contribution to forest-level plans, and investment in the application of models and tools for this investment area.***

The major timber production benefits from these investments will be realized decades from now. However, in the short term, there will be benefits from greater flexibility in the timing of harvesting. There will also be significant social benefits, including employment.

***Key Target***

Over the next five years, Forest Renewal BC's investments to improve timber volume will increase the timber available for potential future harvest by 25 million cubic metres. This will make a significant contribution to the economy of British Columbia and increase future options for sustainable forest management.

***Performance Measures***

- The economic value of timber on all enhanced forestry treatment areas will be increased by between 5 per cent and 30 per cent.
- 25,000 hectares will be added back to the commercial forest base through surveys and planting.
- 125,000 hectares of previously planted land will be brought to free-to-grow status.
- Silviculture investment decisions will be guided by forest-level stewardship plans in 100 per cent of management units.

> ***The Headquarters Investment Plan supports projects that produce strategic planning, an operational framework, operational tools, and decision training that support the delivery of activities for the Sustainable Harvest Objective set out in the Regional Resource Management Plans. The regionally determined activities will achieve the key target and performance measures.***

## *Appendix A: Backlog Reforestation*

| HIP investment in Backlog Reforestation | 1999/2000 ($000s) | 2000/2001 ($000s) |
|---|---|---|
| **Backlog Reforestation** | $288 | $374 |

The Provincial Backlog Reforestation Program will reforest productive forest lands which were disturbed by natural causes such as wildfire and beetle kill or were harvested prior to 1987, the year when reforestation on Crown land was legislated. Site preparation, planting, brushing and spacing activities are undertaken on these sites which are not yet free growing.

The biggest benefits of this program are in northern and north central B.C. where 83 percent of the lands are located. The program increases the province's productive land base and helps maintain the Allowable Annual Cut.

The Headquarters Investment Plan projects for 2000/2001 continue with the initiatives approved and supported by Forest Renewal BC in 1999/2000. The activities at the Headquarters Level that support the provincial Backlog Program include:

- **Strategic Planning for the Backlog Program and Problem Forest Types** provides strategic level analysis for districts and licensees to define the extent and impact of backlog activities.
- **Planting and Natural Regeneration Trials** provide information for shortening time to green-up and provide information on acceptability of "artificial" establishment practices and natural regeneration.
- **Site Preparation Support** provides operational advice for the site preparation component of backlog program and updates to guidebooks.
- **Vegetation Management Support** will continue with referrals and monitoring aerial application spray equipment which is beneficial to operational activities and environmental protection.
- **Contract Administration** supports implementation contracts that will ensure Code compliance and high quality results.

### *Appendix B: Enhanced Forestry Program (EFP)*

The Headquarters Investment Plan (HIP) funds projects that support the Enhanced Forestry Program (EFP) provincially. Enhanced forestry includes incremental activities such as surveys, brushing/weeding, site preparation, backlog planting, spacing, fertilization, pruning, and forest health. The fund has a headquarters support role for investments set out in the regional Resource Management Plans. Headquarters projects support a balanced group of projects to improve decisions that will achieve the performance measures of the Sustainable Harvest Objective for Forest Renewal B.C.

The HIP EFP supports the delivery of Forest Renewal BC's Strategic Harvest Objective. The funding under the HIP emphasizes doing the right things through mechanisms such as training, extension and the provision of tools. Projects may support tactical on-the-ground decisions or strategic planning and monitoring. The FRBC EFP is also the main support for adaptive management training and implementation. The HIP EFP is invested as follows:

| EFP Activities Supported by the HIP | 1999/2000 ($000s) | 2000/2001 ($000s) |
|---|---|---|
| **1) EFP Framework** | 157 | 150 |
| **2) Communications and Marketing** | 100 | 100 |
| **3) EFP decision training** | 141 | 150 |
| **4) Accessible Course Content** | 108 | 100 |
| **5) Operational Decision Support** | 52 | 60 |
| | 558 | 560 |

HIP EFP projects are selected based on predicted performance indicator improvement per dollar spent. Where Forest Renewal BC funding can be leveraged against other funding, the benefits of the total funding are considered as the effect on performance indicators. HIP EFP projects include the following:

***1) EFP Framework***

Projects in this category work to:

- Developed an EFP guide for RMPs in 1999/2000.
- Provide a provincial framework for EFP performance indicators.
- Assist FRBC in the implementation of Strategic Silviculture Planning.
- Provide summary statistics, analyses, and reviews on FRBC accomplishments and land status.
- Develop Standards Agreements for EFP activities and silviculture inspection procedures.
- Develop an operational monitoring protocol to measure efficacy of EFP treatments (MoF/Melp).
- Incorporate habitat values in stewardship plans and performance measurement indicators.

***2) Communications and Marketing***

This category ensures the information provided by the program is accessible and known to potential clients. It includes the following projects:

- Provide a brochure directing interested parties to the EFP website (completed 1999/2000).
- Support well-attended workshops regarding Growth and Yield topics in BC (focus on FRBC ROI) and an industry/province partial cutting workshop.
- Growth and Yield user support center for prognosis.

***3) EFP decision training***

This category supports the provision of courses to ensure practitioners make best investment decisions regarding Enhanced Forestry activities. Training focuses on:

- Making better decisions through adaptive management
- Getting the highest ROI from your silviculture investment
- Enhanced stand management prescriptions

***4) Accessible Course Content***

This category supports the virtual resource center development for EFP courses and reports. Through this initiative, we are providing course material for the web. In 1999/2000, we will add 8 courses to the web for use by clients. To protect the investment Forest Renewal BC has made in training course, we will continue to add courses to the web in 2000/2001.

***5) Operational Decision Support***

This category includes operational tools that have provincial applicability. Projects that will continue to be supported include:

- New stand tending survey procedures.
- Biogeoclimatic Ecosystem Classification development for EFP projects.
- Vegetation Management Response model to ensure investments in brushing have the best possible returns.

### *Appendix C: Forest Level Analysis for Silviculture Investments*

The Auditor General, and consultants hired under past Forest Resource Development Agreements (FRDA 1 and 2) carried out audits on silviculture investments. These audits identified the need to have more strategic placement of backlog and incremental silviculture funds. Most ministry and industry staff agree with this need.

**Background**

- Silviculture Investments have been in the $100 to $150 million per year range.
- Silviculture investments are discretionary.
- Previous audits have identified the need for a more strategic investment.
- The first Timber Supply Review provided a solid foundation for planning.
- A strategic silviculture planning initiative for Crown forest land in British Columbia will enhance investment decisions to ensure improved future quantity and quality of both timber and habitat supply.

***Nature of the HIP Forest Renewal BC Program:***

FRBC intends that silviculture investment decisions be guided by forest level stewardship plans in all management units. FRBC will fund the application of models and tools that link stand level silvicultural decisions to the whole forest. Each forest landscape has a unique pattern of forest types and ages, land-use patterns and timber supply issues. Therefore each forest management unit (timber supply area or tree farm licence) will require a unique strategic mix of silviculture investments to achieve the full potential productivity of its second-growth forest.

| HIP Investment in Forest Level Analysis | 1999/2000 ) | 2000/2001 ) |
|---|---|---|
| **Forest Level Analysis for Silviculture Investments** | $1,500,000 | $1,327,000 |

***Major points of the project:***

- Silviculture investments need to take into account forest-level target conditions.
- All 71 management units in the province will have either a type 1 or type 2 analysis within two years.
- The funding includes forest level planning training.

***Basic types of analysis being performed:***

- ◊ ***Type 1 Analysis*** *uses existing TSR summary information to identify issues and opportunities for silviculture investments, producing interim management unit specific harvest level, timber quality and habitat objectives.*
- ◊ ***Type 2 Analysis*** *is an in-depth forest level analysis to develop silviculture strategies and identify funding needs.*
- ◊ ***Type 3 Analysis*** *develops habitat supply and other non-timber modelling approaches for future incorporation into Type 2 analyses.*

This initiative has a two year time frame to develop a comprehensive silviculture strategy for all management units in the province. Completion of all units will enable summation of strategies and supporting programs to regional and provincial levels.

**Table 1. Workplan and Budget Overview**

| *Funding Category* | *Existing plans* (*) | *1999/00 plans* (*) | *1999/00 $ (000 000s)* | *2000/01 Plans* (*) | *2000/01 $ (000 000s)* | *Totals Plans* (*) | *Totals $ (000 000s)* |
|---|---|---|---|---|---|---|---|
| *Type 1 analysis* | *14* | *28* | *0.420* | *21* | *0.315* | *63* | *0.735* |
| *Type 2 analysis* | *8* | *9* | *0.675* | *10* | *0.750* | *27* | *1.425* |
| *Type 3 analysis* | | | *0.130* | | *0.180* | | *0.310* |
| *Training/projects* | | | *.275* | | *0.255* | | *0.530* |
| *Totals* | *22* | *37* | *1.500* | *31* | *1.500* | *90** | *3.000* |

- *The total number of plans is greater than the total number of management units (71) because some units will have had both type 1 & 2 plans developed.*

The outputs from this strategic planning initiative include:

- a rationalized provincial incremental silviculture strategy;
- a rational investment plan for future FRBC/government funds;
- Objectives and performance indicators at management unit, regional and provincial levels;
- a measure of the potential social benefits, in the short term from silviculture jobs and in the long term from an improved timber supply;
- standardized analysis output for a consistent budget allocation process;
- decision makers' information regarding tree improvement, silvicultural regimes, partial cutting, commercial thinning and management for non-timber values;
- information needed to develop the density management regimes as outlined by the chief forester's policy and guidelines on stand density management; and
- trained competent foresters able to do forest level analysis.

A number of special projects designed to provide answers to planning issues will be completed. Examples of special projects to support the overall project from 1999/2000 include the following:

- Socio-economic framework
- Provincial strategy and management options for problem forest types.
- Evaluation of stand-level growth and yield models.
- Training in forest estate modelling.
- Timber supply impact assessment of evolving forest management practices.
- Survey of forestry-related discount rates in other jurisdictions.
- Analysis methods and indicators for habitat supply.